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(54) Title: PROCESS FOR PURIFYING CAPROLACTAM

(57) Abstract: The invention relates to a process for purifying caprolactam, said process comprising (a) subjecting the caprolactam to a hydrogenation by treating the caprolactam with hydrogen in the presence of a heterogeneous nickel containing hydrogenation catalyst, (b) distilling at least a portion of the hydrogenated caprolactam in a distillation column containing nickel in an amount sufficiently low such that  $\Delta \text{PAN}_{\text{Ni}} \leq 3$ , wherein  $\Delta \text{PAN}_{\text{Ni}} = \Delta \text{PAN} - \Delta \text{PAN}_{\text{Ni}=\text{O}}$ ,  $\Delta \text{PAN}$  = increase of the PAN number of caprolactam during distilling,  $\Delta \text{PAN}_{\text{Ni}=\text{O}}$  = increase of the PAN number of caprolactam during distilling under the same conditions in a distillation column free of nickel. Nickel is removed from the caprolactam solution prior to the distillation step.

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